

## AMENDMENTS TO THE CLAIMS

*A listing of the claims presented in this patent application appears below. This listing replaces all prior versions and listing of claims in this patent application.*

**Claims 1-22 (canceled).**

**Claim 23 (previously added):** A method for the detection or determination of histamine in a sample of microdialysates or dialysates, comprising the steps of:

(A) applying said sample to a biosensor comprising an electrode and (i) a mono-enzyme system of an amine oxidase, which is a copper-containing grass pea oxidase (E. C. 1.4.3.6) or (ii) a bi-enzyme system of an amine oxidase, which is a copper-containing grass pea oxidase (E.C. 1.4.3.6), coupled with horseradish, soybean, tobacco, sweet potato or palmtree peroxidase; wherein said electrode is a carbon/graphite based electrode, and whereby said amine oxidase is cross-linked to the electrode into an osmium based redox polymer; and

(B) detecting an electrical output from said biosensor.

**Claim 24 (previously added):** The method according to claim 23, wherein the peroxidase is horseradish peroxidase.

**Claim 25 (currently amended):** The method according to claim 23, wherein the osmium based redox polymer ~~includes~~ comprises poly(1-vinylimidazole) complexed with  $[\text{Os}(\text{4,4'-dimethyl-bi-pyridin})_2\text{C1}]^{+/2+}$  and polyethyleneglycol)diglycidyl ether as the cross-linking agent.

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**Claim 26 (currently amended):** The method according to claim 23, wherein biosensor is of Type I, Type II or Type III type of biosensor, wherein:

Type I[[:]] is the mono-enzyme or the bi-enzyme system is added directly into the electrode surface; or

Type II[[:]] is the mono-enzyme or the bi-enzyme system is entrapped in the osmium based redox polymer added on the surface of the electrode; or

Type III[[:]] is the mono-enzyme or the bi-enzyme system and the osmium based redox polymer forms sequential coatings added on the surface of the electrode.

**Claim 27 (currently amended):** The method according to claim 26, wherein the biosensor of Type III is one of Type III a, Type III b, Type III c or Type III d, wherein:

Type III a[[:]] is a second coating of the mono-enzyme is coating a dried layer of peroxidase and redox hydrogel; or

Type III b[[:]] is a second coating of peroxidase and redox hydrogel is coating a dried layer of the mono-enzyme; or

Type III c[[:]] is a second coating of the mono-enzyme entrapped in redox hydrogel is coating a dried layer of peroxidase; or

Type III d[[:]] is a second coating of peroxidase is coating a dried layer of mono-enzyme entrapped in redox hydrogel.

**Claim 28 (previously added):** The method according to claim 24, wherein the weight ratio of amine oxidase to horseradish peroxidase is 80:20.

**Claim 29 (currently amended):** A method for the detection or determination of freshness biomarkers or of the content of freshness biomarkers in a food sample, comprising the steps of:

establishing a standard curve between said freshness biomarkers and the electrical output of a biosensor comprising a carbon/graphite based electrode and (i) a mono-enzyme system of an amine oxidase, which is a copper-containing grass pea oxidase (E.C.1.4.3.6), or (ii) a bi-enzyme system of said amine oxidase and a peroxidase, wherein said amine oxidase is cross-linked to the

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electrode into an osmium based redox polymer, and ~~freshness~~ wherein said freshness biomarkers are biogenic amines,

applying said sample to said biosensor;

detecting an electrical output from said biosensor; and

comparing the electrical output of the biosensor when applied to the sample with said standard curve for freshness biomarkers to detect and determine the freshness of the food sample.

**Claim 30 (canceled).**